

Date: 06-06-2013

K 4103

First Year MBBS Examination

I MBBS Physiology Paper 1

Time: 3 hours Max Marks: 50

Instructions: 1. Answer to the points. 2. Figure to the right indicates marks. 3. Use separate answer books for each section. 4. Draw diagrams wherever necessary. 5. Write legibly.

## Section 1

### **1.Explain in detail: (any two) (10)**

a) Define homeostasis. Explain in detail giving 2 examples each of positive feedback and negative feedback mechanism. (A.38) (A.43)

b) Which are various blood group systems? Write in detail about ABO blood group system

c) Explain in detail physiological events/steps in skeletal muscle contraction.

### **2A.Write brief notes on (any two) (6)**

a) Defecation reflex

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b) Enumerate hormones of gastro-intestinal system. Explain in detail about cholecystokinin (CCK)

c) Hazards of mis-matched blood transfusion (A.144) (B.171)

### **28. Write brief on (any one) (3)**

a) Active transport across cell membrane

b) What are immunoglobulin? Give its classification (A.111) (B.138)

### **3. Give brief on (any two) (6)**

a) Name various cell organelles and mention their physiological functions.

b) Write in detail about the refractory period. What is the importance of long-refractory period in cardiac muscle action potential? (A-800) (8.70) (8.180)

c) Functions of saliva. (A.225) (8.739)

## **Section 2**

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### **4. Explain in detail (any two) (10)**

a) Coronary circulation (A.657) (B.265)

b) Spiro gram (A.652) (8.301)

c) Factors affecting Heart rate

**5A. Write briefly on (any two) (6)**

a) Compare and contrast between I and II heart sounds

b) Draw and label structure of respiratory membrane

c) Vital capacity (A.696) (B.301)

**58. Write briefly on (any one) (3)**

a) Effect of exercise on arterial blood pressure

b) Bohr effect (A.743) (8.327)

**6. Short explanatory objective questions any six (6)**

a) Give example of primary active transport

b) What is life span of RBCs?

c) Define motor unit? (A.202) (B.75)

d) Which cell of gastric glands secrete Intrinsic Factor of Castle?

e) What is function of lysozymes in saliva?

f) What is normal value of vital capacity?  
(A.696) (8.301)

g) Why polycythemia occurs in persons living at high altitude?

h) Why S.A. node is called as pacemaker of heart?

i) What is effect of parasympathetic system stimulation on pupils of eyes?

j) What is normal body temperature of human beings?

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